

Appl. No. 09/749,332  
Reply to Office Action of December 13, 2004

Docket No. MIT-070PUS

Drawings:

Replacement drawings are enclosed herewith in an Appendix which follows the signature page of this paper.

REMARKS

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims as amended

Claims 1 to 30 are pending in the application. Claims 11, 18, 20 and 26 are allowed. Claims 1 – 10, 12 – 17, 19, 21-25 and 27-30 are rejected. Claims 2-4, 12, 16, 17, 19 and 26 are amended herein. These amendments are directed to matters of form and are not being made to over come any rejections based upon the prior art. No Claims are being cancelled by this paper and no new claims are being added by this paper.

In accordance with the revised provisions of 37 C.F.R. §1.121(c) as enacted on July 30, 2003, a marked up version of the amended claims is provided above. Also attached in an Appendix are replacement sheets for the figures.

As an initial matter, Applicants cannot identify that certain signed and initialed information disclosure forms (PTO Form 1449) have been returned as identified below. Applicants respectfully request that the Examiner consider the art cited in the below-identified information disclosure statements (if not already done) and provide the signed and initialed information disclosure forms as indicated.

- 1) Submitted with certificate of mailing dated \_\_\_\_\_
- 2) Electronically submitted on\_\_\_\_\_, receiving confirmation number \_\_\_\_\_

The Examiner objected to Claims 2-4, 12, 16, 17, 19 and 26 because of certain informalities. Each of the informalities has been addressed herein in the manner suggested by the Examiner in the Office Action.

In view of the above amendments, Applicants respectfully request that the objection to each of Claims 2-4, 12, 16, 17, 19 and 26 be removed.

The Examiner rejects Claims 1-4, 10, 12-15, 17, 19, 21, 24, 25 and 27-30 under 35 U.S.C. §102(b) as being anticipated by Ramanathan (U.S. Pat. no. 5,850,592)

To sustain a rejection under 35 U.S.C. §102(b), a single reference must disclose each and every element of the claimed invention. In this case, the Ramanathan reference neither describes nor suggests ... forming clusters having at least one cluster-head ... transmitting data from at least one node in at least one of the plurality of clusters to the cluster-head in that cluster ... and ...transmitting data from at least one cluster-head to the base station as called form in Claim 1.

Ramanathan describes a point-to-point system in which messages are exchanged between “gateway stations.” Applicants Claim 1 is directed toward a technique for transmitting all data collected by individual nodes to a base station via the cluster head.

To the extent that the Examiner equates a base station as recited in Applicants’ claim 1 to the gateway stations recited in Ramanathan, Applicants respectfully disagree. It is Applicants position that a fair reading of Ramanathan and Applicants specification make clear that a base station is not the same as a cluster head nor is it the same as a gateway station.

Applicants thus submit that Claim 1 is patentably distinct over Ramanathan.

Claim 2-4, 10 and 12 each depend either directly or indirectly from Claim 1 and thus are patentably distinct over the cited reference for the reasons discussed above in conjunction with Claim 1.

Applicants submit that Claim 13 is patentably distinct over the cited reference since the reference neither describes nor suggests ... a method for forming a network from a base station and a plurality of nodes ... comprising ...electing a cluster-head ... establishing a communication path between ... the ... nodes and the cluster-head to form a cluster ... transmitting from the ... nodes to the cluster-head during [a] first data transmission round ... and transmitting data from the cluster-head to the base station ... as called for in Claim 13.

Claim 14, 15, 17, 19 each depend either directly or indirectly from Claim 13 and thus are patentably distinct over the cited reference for the reasons discussed above in conjunction with Claim 13.

Applicants submit that Claim 21 is patentably distinct over the cited reference since the reference neither describes nor suggests ...a network comprising ... a base station ... and a plurality of nodes comprising ... a cluster-head selector processor; and a cluster selector processor, each cluster comprised of a subset of said plurality of nodes, and one of each of said subset of said plurality of nodes temporarily acting as a cluster-head ...as called for in Claim 21.

Claim 24, 25, 27, 28, 29 and 30 each depend either directly or indirectly from Claim 13 and thus are patentably distinct over the cited reference for the reasons discussed above in conjunction with Claim 21.

In view of the above, Applicants submit that Claims 1-4, 10, 12-15, 17, 19, 21, 24, 25 and 27-30 are patentably distinct over the Ramanathan.

The Examiner rejects Claims 5-9 under 35 U.S.C. §103(a) as being unpatentable over Ramanathan (U.S. Pat. no. 5,850,592) in view of Gelvin (U.S. Pat. no. 6,735,630).

Each of claims 5-9 depend either directly or indirectly from Claim 1 and thus include the limitations of Claim 1. As discussed above, Ramanathan fails to describe a base station. Gelvin also fails to describe a base station. Since the references relied upon by the examiner neither describe nor suggest ...a method of forming a network from a plurality of nodes and a base station ... forming clusters having at least one cluster-head ... transmitting data from at least one node in at least one of the plurality of clusters to the cluster-head in that cluster ... and ...transmitting data from at least one cluster-head to the base station as called form in each of claims 5-9, Applicants submit that these claims are patentably distinct over the combination relied upon by the Examiner.

The Examiner rejects Claim 16 under 35 U.S.C. §103(a) as being unpatentable over Ramanathan (U.S. Pat. no. 5,850,592) in view of Estrin.

Claim 16 depends (indirectly) from Claim 13 and thus include the limitations of Claim 13. Since the references neither describe nor suggest ... a method for forming a network from a base station and a plurality of nodes ... comprising ...electing a cluster-head ... establishing a communication path between ... the ... nodes and the cluster-head to form a cluster ...  
transmitting from the ... nodes to the cluster-head during [a] first data transmission round ...  
and transmitting data from the cluster-head to the base station ...as called for in Claims 16, Applicants submit that Claim 16 is patentably distinct over the combination relied upon by the Examiner.

The Examiner rejects Claims 22 and 23 under 35 U.S.C. §103(a) as being unpatentable over Ramanathan (U.S. Pat. no. 5,850,592) in view of Clare.

Claims 22 and 23 each depend either directly or indirectly from Claim 21 and thus include the limitations of Claim 21. Thus, Applicants submit that Claims 22 and 23 are patentably distinct over the cited reference since the reference neither describes nor suggests ...a network comprising ... a base station ... and a plurality of nodes comprising ... a cluster-head selector processor; and a cluster selector processor, each cluster comprised of a subset of said plurality of nodes, and one of each of said subset of said plurality of nodes temporarily acting as a cluster-head ...as called for in each of Claims 22 and 23.

The Examiner objects to Claims 11, 18, 20, 26 as being dependent upon a rejected base claim, but indicates that these Claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

In view of the above Amendment and Remarks, Applicants submit that Claims 1-30 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

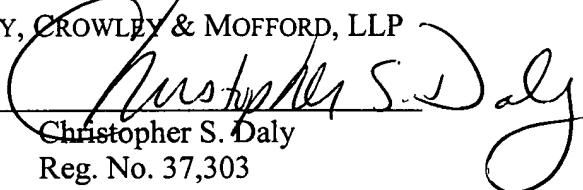
The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

Dated: 13 Apr 05

Respectfully submitted,

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Appendix:

Figure(s) 1-10 shown as Replacement Sheet(s) are attached.